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ORDER FOR SUPPLIES OR SERVICES PAGE NO **SCHEDULE - CONTINUATION** 2 MPORTANT: Mark all packages and papers with contract and/or order numbers. DATE OF ORDER CONTRACT NO. ORDER NO. 68HE0318D0009 68HE0121F0005 12/01/2020 ITEM NO. SUPPLIES/SERVICES QUANTITY UNIT UNIT AMOUNT QUANTITY ACCEPTED ORDERED PRICE (d) (a) (f) (b) (c) (e) (g) This Task Order is a Cost Plus Fixed Fee Order under RAF DES CLIN 001. All contract clauses and terms and conditions are incorporated into this Task Order. Clauses modified or added to this task order are attached. Statement of Work entitled "Design and Engineering Services (DES) Contract Statement of Work (SOW) GE-Pittsfield/Housatonic River Superfund Site is attached. The following EPA personnel are authorized to provide technical direction only under this Task Order. Any changes and/or deviations to the terms and conditions of this Task Order can only be authorized through an SF30 executed by a warranted Contracting Officer. EPA COR/RPM: Dean Tagliaferro 617-918-1282 EPA COR/PO: Heidi Horahan 617-918-1430 EPA COR/PO: Rosanne Sawaya-O'Brien 617-918-1423 The contractor's Work Plan and Cost Proposal-Ordered Tasks dated 11/18/2020 is hereby incorporated and Work Plan Cost Proposal-TBD Tasks dated 09/23/2020 is hereby acknowledged for potential future Government requirements under this task order. The initial order and task order ceiling is for \$3,701,692.24 and (b) (4) LOE hours and

The initial order and task order ceiling is for \$3,701,692.24 and (b) (4) LOE hours and is inclusive of all costs and fixed fee noted below associated with the contractor's proposal for Task Order Years 1 and 2.

Cost: \$<mark>(b) (4)</mark>

Total Cost and Fixed Fee: \$3,701,692.24

The contractor shall not exceed the total

Continued ...

ORDER FOR SUPPLIES OR SERVICES SCHEDULE - CONTINUATION

PAGE NO

3

MPORTANT: Mark all packages and papers with contract and/or order numbers.

DATE OF ORDER CONTRACT NO.

12/01/2020 68HE0318D0009

ORDER NO. 68HE0121F0005

ITEM NO.	SUPPLIES/SERVICES	QUANTITY		UNIT	AMOUNT	QUANTITY
(a)	(b)	ORDERED (c)	(d)	PRICE (e)	(f)	ACCEPTED (g)
	cost and fixed fee noted above. The Task					
	Order value and Approved Budget					
	for all ordered work in the SOW is					
	\$5,656,003.13 and (b) (4) LOE hours. The					
	Task Order Estimated Potential Ceiling					
	is \$5,924,350.88 and (b) (4) LOE hours which					
	is inclusive of all ordered and TBD work.					
	An additional modification					
	will be issued to change the period of					
	performance and incrementally order more					
	work as the need arises.					
	TOCOR: Dean Tagliaferro Max Expire Date:					
	09/29/2023					
	Admin Office:					
	Region 1					
	US Environmental Protection Agency					
	5 Post Office Square Boston MA 02109-3912					
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	Approval of Work Plan and cost proposal					
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	21-TR2B-1A00P-000DD2-2505-C001-211APLP					
	505-001 BFY: 21 Fund: TR2B Budget					
	Org: 1A00P Program (PRC): 000DD2					
	Budget (BOC): 2505 Job #: 0167BE02					
	Cost: C001 DCN - Line ID:					
	211APLP505-001					
	Funding Flag: Complete					
	Funded: \$3,701,692.24					
991	Original request from program				0.00	
	Requisition No: PR-RAF1-20-00035					
	Accounting Info:					
	BFY: 00 Fund: ZERO Budget Org: DOLLAR					
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	TOTAL CARR ED FORWARD TO 1ST PAGE (ITEM 17(H))		1		\$3,701,692.24	

ORDER FOR SUPPLIES OR SERVICES SCHEDULE - CONTINUATION

PAGE NO

4

 MPORTANT: Mark all packages and papers with contract and/or order numbers.

 DATE OF ORDER
 CONTRACT NO.
 ORDER NO.

 12/01/2020
 68HE0318D0009
 68HE0121F0005

ITEM NO.	SUPPLIES/SERVICES	QUANTITY ORDERED (c)	UNIT	UNIT PRICE (e)	AMOUNT	QUANTITY
(a)	(b)	(c)	(d)	PRICE (e)	(f)	ACCEPTED (g)
	Funding Flag: Complete					
	Funded: \$0.00					
	TOTAL CARR ED FORWARD TO 1ST PAGE (ITEM 17(H))	>			\$0.00	

Design and Engineering Services (DES) Contract Statement of Work (SOW) GE-Pittsfield/Housatonic River Site

In accordance with current applicable laws, regulations, guidance and policies, the contractor shall furnish all necessary personnel with appropriate knowledge and expertise, materials, equipment, and services needed for, or incidental to, performing and completing work in accordance with the requirements of this statement of work. Services under the DES contracts may be ordered by any EPA Region or Headquarters Office.

This SOW describes the services that may be required in the oversight of response action at the at the GE-Pittsfield/Housatonic River Site. The Site covers a wide geographic area beginning in Pittsfield Massachusetts and includes the Housatonic river and its associated floodplain from Pittsfield to the dam in Connecticut.

BACKGROUND General Electric (GE) used Polychlorinated biphenyls (PCBs) at its 254-acre facility in Pittsfield from 1932 to 1977. During this time, the Transformer Division manufactured and repaired transformers containing dielectric fluids, some of which included PCBs. PCBs and other hazardous substances were released to soil, groundwater, Silver Lake, the Housatonic River and were disposed of within and around the facility in landfills, former river oxbows, and other locations. The Consent Decree (CD) for the GE-Pittsfield/ Housatonic River Site was approved by the federal court in October 2000. The CD may be found on EPA's project website located at: https://www.epa.gov/ge-housatonic. The CD, the legal agreement between EPA and GE, segregated the Site into 28 separate cleanups. Other background information is documented at the EPA's GE-Pittsfield/Housatonic River web page at: https://www.epa.gov/ge-housatonic. The status of the twenty-eight cleanup locations is as follows:

- A. Twenty Removal Actions Outside the River (also referred to as removal Action Areas or "RAAs"). Remediation is complete and post-removal site control activities (e.g., inspection and maintenance activities) are ongoing at all RAAs.
 - o Ten in the GE Plant Area;
 - o Five in the Former Oxbow Areas;
 - o Three in the Floodplains;
 - o Silver Lake Area; and
 - Allendale School:
- B. Five Groundwater Management Areas (GMAs): Monitoring is complete at one GMA (GMA 5), limited monitoring remains at one other GMA (GMA2), and monitoring and response actions are underway at the remaining three (GMA1, GMA 3, and OPCA/GMA 4).

C. Three River Reaches:

 Upper ½-Mile Reach: Remediation is complete and post-removal site control activities are ongoing. A draft Final Completion Report is currently under review by EPA.

- o 1½-Mile Reach: Remediation is complete and post-removal site control activities (e.g., inspection and maintenance) are ongoing.
- Rest of River (RoR): For the RoR, investigations under the CD have been underway since 1998. EPA issued its proposed remedial action in 2016 in the form of a RCRA Permit Modification. The Permit was appealed by five parties. A portion of the Permit was upheld and is in effect and other portions of the Permit are on hold. EPA is in the process of issuing a revised Permit and anticipates issuing the Permit for public comment in 2020. The CD requires that after EPA issues its final remedy decision and all appeals have been satisfied, GE will implement the cleanup as a CERCLA remedy.

EPA requires contractor support to assist in overseeing the performance of the above described response actions by the Potentially Responsible Parties and their consultants and assistance with the response to comments and finalization of the RCRA permit.

The work areas under this DES Contract are separated into eight (8) functional areas (tasks):

- 1. General Requirements
- 2. Field Work and Analytical Support
- 3. Treatability Studies
- 4. Remedial Investigation/Feasibility Study (RI/FS)
- 5. Engineering Evaluation/Cost Analysis (EE/CA)
- 6. Remedial Design (RD)
- 7. Oversight or Oversight Support
- 8. Other Work Areas/General Technical Assistance

This task order SOW identifies which activities under each functional area will be required for the specific project and which are not applicable. The task order statement of work will identifies any Region-specific or new EPA policy or guidance not specifically outlined in the contract statement of work. For each task order, the contractor shall provide cost information and schedule based on the work breakdown structure identified in that task order.

Anticipated Period of Performance (POP) for this task order is from date of issuance [assume August 1] to September 2023.

Task 1: General Requirements

The general requirements section outlines activities that will be completed by the contractor for a majority of the task orders issued under this contract. The activities in this section include:

- 1.1 Systematic Project Planning;
- 1.2 Site-Specific Plan(s) Development;
- 1.3 Project Management, Monitoring and Reporting;
- 1.4 Greener Cleanups and Sustainability Considerations;
- 1.5 Optimization Considerations;
- 1.6 Community Involvement; and
- 1.7 Task Order Close Out.

The need for these requirements and the amount of information/level or effort required will is outlined in this task order statement of work.

1.1 Systematic Project Planning (Order)

The following planning activities may be conducted, as deemed appropriate, throughout the duration of the project. Project-specific requirements will be outlined in the specific task order document. These activities may include, but are not limited to:

- Kickoff meeting. Upon award of the task order, the contractor must schedule a kickoff meeting prior to commencing work. Technical staff, quality staff, EPA contract staff, and other stakeholders should be included to discuss the statement of work, site visit and document review needs. The meeting will also be used to outline project specific requirements including: project objectives, data gaps, potential sampling and analysis methods, and performance goals. The deliverable after the kickoff meeting will be a project schedule and general work plan. Scoping/Kickoff meetings will be documented in the UFP-QAPP.
- Site visit. The contractor shall coordinate with EPA to schedule a site visit.
- Review relevant background documentation.
 - See GE-Pittsfield/Housatonic River web site (https://www.epa.gov/ge-housatonic) with a focus on the following documents:
 - o ROR page
 - 2016 Permit
 - 2020 Settlement Agreement and Fact Sheet
 - SOW documents (dam submittals, BMP, BCAs)
 - o Recent submittals and approval letters for GMA 1
 - o Recent submittals and approval letters for GMA 3
 - o Recent submittals and approval letters for OPCA/GMA 4 groundwater report
 - o Recent submittals for OPCAs, including air monitoring tables
 - o Air monitoring tables for Allendale School
 - O Site Wide Documents: RAA inspection Reports
 - 1.5 Mile Reach Removal Action
- Conduct systematic planning meetings. Throughout the duration of the project the contractor shall schedule systematic planning meetings to revisit project specific requirements and discuss any changes or modifications needed in project scope, schedule and/or budget.

1.2 Site-specific Plan(s) Development (Order)

Review, prepare, update, and/or maintain relevant or required site-specific plans in accordance with applicable guidance. Site work shall not commence on a project until EPA (the remedial project manager (RPM), contracting officer's personnel (COR) or other management personnel) have approved all the site-specific submittals required in the task order document. Some site-specific plans that may be requested include, but are not limited to the following:

- Uniform Federal Policy Quality Assurance Project Plan (UFP-QAPP)². A UFP-QAPP is a formal document describing in comprehensive detail the necessary quality assurance (QA), quality control (QC), and other technical activities that must be implemented to ensure that the results of the work performed will satisfy the stated performance criteria. A UFP-QAPP integrates technical and quality control aspects of a project throughout its life cycle, including planning, implementation, assessment, and corrective actions. The UFP-QAPP will provide:
 - Data quality objectives³ (DQO) that specify the data needed to support decisions regarding remedial response activities.
 - Field sampling plan (FSP) that describes the number, type, and locations of samples and types of analyses.
 - Data Validation Requirements
- Data Management Plan (DMP). The DMP will detail the standard processes, procedures and tools that the contractor will use to support response activities and include requirements for all EPA data

deliverables. The DMP will be developed in accordance with EPA national and region-specific data management plans or guidance. The DMP will describe procedures to take over and manage the existing (government furnished) database management system to effectively work with the volume of data that has been generated and stored for the project. The current system is a Microsoft Access database which contains over 20,000 sample records (>150 Mbytes).

• Health and Safety Plan (HASP)⁴. The HASP specifies employee training, protective equipment, medical surveillance requirements, standard operating procedures, and a contingency plan.

These plans may be modified if project conditions change, as requested by EPA. If a change in the site plans results in a modification to the task order, the change will be negotiated, as appropriate, and the task order will be modified.

1.3 Project Management, Monitoring and Reporting (Order)

The contractor shall perform activities required to manage the task order effectively. Activities may include, but are not limited to: preparing monthly progress reports (due the 20^{th} of each month) in accordance with the requirements under the contract; preparing and submitting invoices in accordance with the requirements under the contract; ; and submitting ad-hoc reports during the projects as requested by the project manager. During the project, the contractor shall also accommodate any external audit or review mechanism as required by EPA.

The contractor shall undertake the following activities to manage the project. Activities mandated under the task order include, but are not limited to:

- Prepare monthly progress reports in accordance with the requirements under the contract;
- Prepare and submitting invoices in accordance with the requirements under the contract and track costs in accordance with cost recovery paragraphs specified in the CD;
- Participate in monthly calls supplemented with quarterly in person meetings.

Throughout the project, the contractor shall avoid duplication of prior efforts in gathering and assimilating project or site information. The contactor shall utilize the most applicable and current regulations and guidance documents when conducting work. The contractor shall continually look for and implement ways to streamline activities and minimize costs without compromising quality. The contactor shall assign work to personnel at the appropriate professional and/or technical levels and with the appropriate skill to most efficiently perform the task(s).

1.4 Greener Clean-ups and Sustainability Considerations (Not Applicable)

1.5 Optimization Considerations (Not Applicable)

1.6 Community Involvement (Order)

The contractor shall provide technical assistance in supporting EPA's community involvement and outreach activities at the Site. The contractor shall provide support for quarterly CCC meetings, such as assistance in EPA presentations and logistical support. CCC meetings will be coordinated and facilitated by a separate EPA contractor. Contractor shall review the following Site web page that documents Public outreach activities: https://www.epa.gov/ge-housatonic/public-comment-meetings-and-events-ge-pittsfield-housatonic-river-site.

1.7 Task Order Close Out (TBD) Assume 25 hours

The contractor shall close out task orders. Activities include but are not limited to returning documents to EPA or other document repositories, file duplication, distribution, and storage, file archiving to meet

Federal Records center requirements, and preparation of a close-out report in accordance with the task order requirements.

Task 2: Field Work and Analytical Support (Order)

The field work section outlines those activities that require the contractor to send personnel on the site to gather environmental samples. This section also outlines expectations for the contractor to manage, analyze evaluate and report data and information from field activities. The activities described in this section may be included as subtasks in other tasks in this contract. All analytic work shall be done in compliance with the EPA Forum on Environmental Measurement Competency Policy (Policy to Assure Competency of Laboratories, Field Sampling, and Other Organizations Generating Environmental Measurement Data under Agency funded Acquisitions (Agency Policy Directive Number FEM 2011-01)). All activities shall be performed in accordance with the EPA-approved UFP-QAPP, or amendments included in other project specific work plans.

The activities in this section include:

- 2.1 Field Investigation;
- 2.2 Analytical Support and Data Validation;
- 2.3 Data Compilation and Evaluation; and
- 2.4 Develop or Update the Site Conceptual Site Model

2.1 Field Investigation¹⁰ (Not Applicable)

2.2 Sample Collection, Analytical Support and Data Validation (Order)

The contractor shall perform sample collection, analytical support and data validation activities. These activities include:

- Environmental sample collection;
- Analytical Services and Support;
- Data validation; and
- Data management

• Surface water sampling

Split samples shall be collected quarterly with GE at two locations (12 events October 2020 through January 2023): The Silver Lake outfall and the Pomeroy Avenue bridge.

Collect and analyze 12 rounds of surface water samples for total PCB Aroclors and Congeners, and QC samples as required per the QAPP; prepare trip report summarizing each sampling round. Provide a final submittal with complete data packages, data validation results, trip reports, and summary tables at the completion of sampling;

Assume 12 rounds (at two locations) of surface water split samples will be collected.

The contractor shall arrange for analysis for total PCB Aroclors and Congeners using the Method SW3510C/8082 (lower detection level) and Method 1668A respectively. Data Validation for PCB Aroclor analysis will be performed by the contractor and will include a Data Validation memo. Data Validation for PCB Congeners will be performed EPA.

Also assume that, in accordance with the Approved QAPP, the following surface water quality control samples will be collected and analyzed for PCB Aroclors: 1 duplicate, and 1MS/MSD per

year. This will add up to a total of 6 surface water samples to be analyzed for PCBs Aroclors and 3 samples for PCB congeners (no MS/MSD required) per sampling location.

In addition, assume 2 split samples for PCB Aroclors and Congeners for Surface water samples collected as part of Rest of River, with similar requirements as outlined above. QC samples can be assumed to be covered in surface water samples described above.

For cost tracking, all costs for sampling activities at Silver Lake, Pomeroy Avenue and Rest of River shall be tracked separately.

• OPCA/Allendale School PCB Air Sampling

Provide necessary personnel, equipment, supplies, analytical and data validation services to collect and analyze 3 samples plus one duplicate and one equipment blank sample (for a total of 5 Poly-urethane Foam (PUF) samples per round) for two sample rounds. Sampling rounds will be conducted in July and September.

Assumptions:

Method T0-4 with PCB Aroclor method and overall reporting limit of 0.0003 ug/m³

Government will provide 5 PUFF air samplers from Tisch Environmental.

2 rounds of sampling each year for three years.

Assume that the air sampling and analysis includes 3 samples plus one duplicate sample and one blank (for a total of 5 PUF samples per round). Tasks associated with the sampling events include physically deploying and calibrating the samplers at least 2 weeks before the first annual sampling event, decontaminating the sample housings and loading the puff media the day before each sampling event, initiating the sampling round and conducting periodic checks of the samplers throughout the first day, collecting the samples the following morning, logging, packing, and shipping the samples to the analytical laboratory, downloading the data logger files and completing the data-bridge volume calculations for final presentation of the analytical results on a per volume sampled (i.e.; $\mu g/m3$) basis, and physically retrieving the samplers for winter storage following the final annual event.

Additional tasks include re-certification of the calibration orifices from Tisch Environmental and, annual calibration checks, and data bridge volume calculation verification. There may be \$500-\$1000 fee for an official orifice re-certification.

Electric service pole rental is included for \$100/month for 12 months.

• Soil and sediment split samples

Provide necessary personnel, equipment, supplies, analytical and data validation services to collect and analyze on split samples from PRP activities.

Assumptions:

A total of 200 soil/sediment split samples will be collected from Rest of River. Split samples will be analyzed for PCB Aroclors. Assume that 10 field duplicate and 10 MS/MSD sample will be collected in accordance with an approved QAPP. Data validation will be completed, and summary tables will be prepared at the completion of sampling. Assume that samples will be shipped out on 10 occasions and there will be 0 data packages. PCB Aroclors will be analyzed using the Method SW3510C/8082 (lower detection level). Data Validation for PCB Aroclor analysis will be performed by the contractor and will include a

Data Validation memo.

2.2.1 Environmental sample collection

The contractor shall provide personnel and equipment to collect environmental samples. Sampling shall be performed in accordance with the EPA-approved UFP-QAPP, or amendments included in other project specific work plans.

2.2.2 Analytical Services and Support

Throughout the project planning and implementation, the contractor shall work with the RPM or TOCOR on selection of analytical services. The contractor shall procure laboratory survives the meet the requirements of this Task Order. If the contractor is unable to procure appropriate laboratory services, then the contractor shall request and perform analytical services in compliance with EPA requirements. In general, the contractor shall follow the FASTAC-tiered hierarchy for obtaining analytical services.

- Tier 1 EPA Regional Laboratory and ESAT Contract
- Tier 2 National Analytical Services Contracts (i.e., CLP)
- Tier 3 Region Specific Analytical Services Contract
- Tier 4 Analytical Services IAGs and Field Contracts/Subcontracts

For Analytical Services that are not under direct oversight by EPA (Tier 4), the contractor shall provide evidence that the laboratory has experience with and is fully capable of performing the required analytical method¹³.

All electronic data deliverables are to be received from the contractor laboratory or sub- contracted laboratory in the Staged Electronic Data Deliverable (SEDD) 2a, 2b or SEDD 3 format¹⁴. The contractor is responsible for ensuring the laboratory can generate a compliant SEDD file.

2.2.3 Data Validation

Data Validation activities include evaluating and qualifying laboratory analytical data against predefined requirements outlined in the UFP-QAPP. In general, the contractor shall not conduct data validation of its own data generated under this contract. Options for subcontractor data validation will be evaluated on a task order specific basis.

The contractor shall provide a data validation of data packages and electronic deliverables as detailed in the UFP-QAPP, and as outlined above in this task order and considering the documents and requirements listed below:

- EPA's Guidance on Environmental Data Verification and Data Validation, EPA QA/G-8
- CLP, Regional data review SOPs, and National and Regional Data Validation Functional Guidelines/Guidance¹⁵ (e.g. may include dioxins and explosives) and directives;
- CLP Routine Analytical Services (RAS) and Modified Analyses contract protocols and performance requirements;
- EPA's Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use, EPA-540-R-08-005, January 2009 (OSWER Directive 9200.1-85);
- Individual Regional laboratory contracts protocols and performance requirements;

Upon completion of the data validation, the contractor shall upload the data and update the Data Management System required by Section 8 of this Task Order.

2.3 Data Management and Evaluation (Order)

The contractor shall provide data management support services that address the collection, processing, management, distribution, analysis and archival of data and information consistent with this task Order. The contractor shall prepare submittals for each sampling event that include full laboratory data packages and data validation reports. The contractor shall also prepare tables and spreadsheets for split sampling events with the PRP. For PCB air sampling results, the contractor shall provide a full data package, including air sampling flows and calculations, and also summary tables in ug/m³. The contractor shall manage the data as described in Section 8 of this Task Order.

The contractor shall:

- coordinate closely with EPA regional GIS or Records Management leads for specific portions of integrated projects.
- Manage and archive data consistent with the EPA approved Data Management Plan (DMP).
- Provide EPA with a comprehensive electronic final archival of sampling and monitoring data and data deliverables that are consistent with EPA national and regional-specific requirements.
- All spatially referenced data must be delivered in a standard ESRI spatial file format¹⁷, with the file geodatabase currently preferred. All GIS files¹⁸ submitted must have spatial reference information that describes the projection, datum, and where applicable, the collection methods.

Contractor shall include costs for this task in Section 2.2 or Section 8.

Task 3. Treatability Studies (Not Applicable)

Task 4. Remedial Investigation/Feasibility Study (RI/FS)/Remedy Selection Support

- 4.1 Remedial Investigation (including risk assessment) (Not Applicable)
- 4.2 Feasibility Study (Not Applicable)
- 4.3 Post RI/FS Support (Order)

Draft and Final Permit (RCRA equivalent of Proposed Plan/ROD/Post RI/FS Support)

The target date for issuance of the Draft Permit is late May/early June. The contractor shall provide support required for the Response to Comments for draft Permit and finalization of the Permit. Activities include, but are not limited to, the following:

- Attend two public meetings and one public hearing;
- Provide technical assistance in the preparation of the Responsiveness Summary; See Response to Comments for Draft 2014 Permit at https://semspub.epa.gov/src/document/01/593922.
- Provide technical information and graphics support for a fact sheet and technical documents to support the Final Permit. Assume 10 15 graphics will be required.
- Task 5. Engineering Evaluation/Cost Analysis (EE/CA) (Not Applicable)
- Task 6. Remedial Design (RD) (Not Applicable)
- Task 7: Oversight or Oversight Support (Order and TBD)

Under this task, the contractor shall provide technical support to EPA in fulfillment of its responsibilities for oversight and enforcement of environmental remediation work being financed and performed by and the potentially responsible party (PRP).

Oversight activities specified, may include, but are not limited to:

- 7.1 Field Oversight;
- 7.2 Site Assessment Support
- 7.3 Treatability Study Support;
- 7.4 RI/FS or Site Investigation Support;
- 7.5 Removal Support;
- 7.6 RD Support; and
- 7.7 Remedial Action and Operation and Maintenance Support

7.1 Field Oversight (Order)

Field work includes field audit and inspections and the field work activities outlined in Task 2 including split sampling.

7.1.1 Field Audits and Inspections

The contractor shall conduct field audits and inspections to evaluate responsible parties' implementation of Removal Actions, Remedial Design (RD), Remedial Action (RA), operation and maintenance (O&M) activities. This activity may include, but is not limited to, the following activities:

- Review implementation of work plans, sampling and analytical plans (SAP)/Quality assurance project plans (QAPPs) in the field;
- Observe sampling activities for compliance with settlement documents, approved sampling and analysis plan/quality assurance project plan (QAPP);
- Maintain a log of detailed observations at the site, including interactions with all parties, results of
 field tests, observations about conformance with the project-specific plans and deviations from the
 approved plans. Field notebooks/journals and logs may be supplemented by photographs and/or
 videotaping; and
- Prepare technical field oversight reports, which may include period reports and a final summary report.

Specific requirements are identified in Sections 7.5 and 7.6.

Contractor shall include costs for this subtask in items 7.5 and 7.6

7.2 Site Assessment Support (Not Applicable)

7.3 Treatability Study Support (TBD) Assume 100 hours

The contractor shall provide support to EPA in the oversight of the treatability study activities conducted by another party. These activities may include, but are not limited to, reviewing the treatability study work plan and QAPP, overseeing treatability study activities, and review the draft and final treatability study report.

7.4 RI/FS or Site Investigation Support (Not Applicable)

7.5 Removal Support (Order)

The contractor shall provide support to EPA in the Oversight of GE's Response Actions for Removal Action Areas (RAAs), Groundwater Management Areas (GMAs) and the Upper ½-Mile Reach. This includes_groundwater/NAPL response activities and post-removal site control activities at 22 completed removal actions. Removal support will include review of draft and final

documents, field oversight, and split sampling.

Document Review Including: (Order)

- -Groundwater/NAPL/Indoor air submittals:
 - -Three documents between August 2020 and December 2020 (Spring reports for GMA-1, GMA-3 and GMA-4/OPCAs).
 - -Three documents between Jan-Mar 2021 (Fall reports for GMA-1, GMA-3 and -GMA-4/OPCAs);
 - -Two annual reports between May and July 2021 (and annual reports for GMAs 2);
 - -Three Documents between August 2021 and December 2021 (Spring reports for GMA-1, -3 and -4/OPCAs).
 - -GMA-1 revised chlorobenzene report (late 2020)
 - -GMA-3 revised chlorobenzene report (late 2020)
 - -2 GMA-1 remedial design for groundwater treatment (estimated late 2020/2021)
 - -2 GMA-3 remedial design for groundwater treatment (estimated late 2020/2021)
 - -4 NAPL optimization reports between August 2020 and January 2022.
 - -2 Indoor Air Reports

-RAA Post-Removal Site Control Reports:

- -2020 Fall RAA Inspection Report (January 2021)
- -2021 May Inspection Report (July 2021)
- -2021 Fall RAA Inspection Report (January 2022)
- -2020 Spring Downstream Residential Floodplain Properties Inspection Report (July 2020)
- -2020 Summer Downstream Residential Floodplain Properties Inspection Report (October 2020)
- -2021 Spring Downstream Residential Floodplain Properties Inspection Report (July 2021)
- -2021 Summer Downstream Residential Floodplain Properties Inspection Report (October
- 2021) -2020 Spring Unkamet Brook non-NRRE inspection Report (July 2020)
- -2020 Summer Unkamet Brook non-NRRE inspection Report (October 2020)
- -2021 Spring Unkamet Brook non-NRRE inspection Report (July 2021)
- -2021 Summer Unkamet Brook non-NRRE inspection Report (October 2021)
- -2021 Summer Unkamet Brook NRRE inspection Report (October 2021)
- -2020 Summer Silver Lake non-NRRE inspection Report (October 2020)
- -2020 Summer Silver Lake NRRE inspection Report (October 2020)
- -2020 Silver Lake Annual Report (February 2021)
- -2021 Summer Silver Lake non-NRRE inspection Report (October 2021)

-Upper ½-Mile Reach Removal Action:

-2 revised Draft and a Final Upper ½-Mile Reach Final Completion Report (fall 2020, spring 2021, summer 2021).

Field Work Oversight Including:(Order)

- -Groundwater/NAPL/Indoor air sampling and collection activities
 - -Ongoing, generally semi-annual sampling
- -RAA inspections
 - -2020 Fall RAA Inspection (Oct-Dec 2020)
 - -2021 May Inspection (May 2021)
 - -2021 Fall RAA Inspection (Oct-Dec 2021)
 - -2020 Summer Downstream Residential Floodplain Properties inspection (Sept-Oct 2020)
 - -2021 Spring Downstream Residential Floodplain Properties inspection (May 2021)
 - -2021 Summer Downstream Residential Floodplain Properties Inspection (Sept-Oct 2021)

- -2020 Summer Silver Lake inspection (Sept-Oct 2020)
- -2021 Summer Silver Lake Inspection (Sept-Oct 2021)
- -2020 Summer Unkamet Brook inspection (Sept-Oct 2020)
- -2021 Spring Unkamet Brook inspection (May 2021)
- -2021 Summer Unkamet Brook Inspection (Sept-Oct 2021)
- -3-5 inspections of work on Conditional Solution properties or other post-removal site control activities.

1.5 Mile Reach Removal Action Including: (Order-Price Separately)

- -Conduct oversight of annual Conditional Solutions (CS) inspections and report reviews (Fall 2020 and 2021)
- -Conduct oversight of semi-annual inspections (Fall 2020 and 2021) of the retaining wall abutting Elm Street Bridge, the inspection of the retaining wall by a Professional Engineer in 2021 and associated report reviews. -Conduct oversight of tree cage maintenance and removal activities (2020 and 2021)
- -Review 2020 Annual report (February 2021)

Environmental Restrictions and Easements (ERE) Support (Order-Price Separately)

This contractor shall review of draft ERE submittals, oversight of annual ERE field inspections, review of annual ERE inspection reports, review of work plans to comply with EREs, oversight of field work to ensure compliance with EREs, and support with updating ERE tables and Figures. Assume annual ERE inspections (3 days effort), one report review, one update to tracking table and review of one ERE submittal.

Support/Reporting Requirements (Order)

Contractor shall:

- -participate in weekly 30-minute calls with the PRP and State;
- -Generate and maintain a PRP report submittal tracking form indicating date received, status of internal comments, and status if discussions with the PRP;
- -Generate a weekly summary of field activities completed the previous week and field work forecasted for the upcoming week;
- -Participate in calls with EPA, DEP and the PRP as required to resolve issues. Assume 2 hours per week.

7.6 RD Support (Order and TBD)

The contractor shall provide support to EPA in the oversight of RD activities conducted by the PRP. RD activities can include: reviewing technical requirements required by the final Permit/Remedial Action.

7.6.1 Review of PRP Submittals (Order)

Work under this task will include technical review by the contractor of documents related to oversight of the Remedial Design and associated documents required by the Final Permit/Remedial Action. The TOCOR will provide details to help focus review of each of the documents. The contractor shall provide detailed comments and recommendations based on the review of each document. Following delivery of the document review report to EPA, the contractor shall be prepared to hold a follow-up discussion by telephone and/or e-mail with the TOCOR to answer

questions that the TOCOR may have concerning the review, and participate in calls with EPA, the PRP, and other stakeholders.

The contractor shall review and provide comments on documents, including, but not limited to the following. See 2016 Permit for list of additional RD documents. Additionally, the contractor shall review the revised reports and responses to comments as required.

Document*	Approximate	Review
	Submittal Date	Period
Baseline Monitoring Plan	Received in 2018	120 days
Consumption Advisory Outreach Plan-CT	Received in 2018	90 days
PDIWP-Revised Reach 5A Floodplain	Sept 2020	30 days
PDI Summary Report-Reach 5A Residential Properties	Nov 2020	30 days
PDI Summary Report-Reach 5A Non-Residential	March 2021	45 days
Properties		
PDIWP-Reach 5A Sediment and Banks	Dec 2020	45 days
PDI Summary Report-Reach 5A Sediment and Banks	August 2021	30 days
RPOEC Work Plan-Reach 5A	January 2021	45 days
RPOEC Report	December 2021	60 days
Cultural Assessment WPs	July 2021	45 days
Cultural Assessment Reports	January 2022	60 days
Conceptual RD/RA WP-Reach 5A	January 2022	90 days
Final RD/RA WP-Reach 5A	TBD	TBD
PDIWP-Upland Disposal Facility	October 2020	45 days
PDI Summary Report-Upland Disposal Facility	July 2021	60 days
Conceptual RD/RA Upland Disposal Facility WP	January 2022	60 days
Final RD/RA Upland Disposal Facility WP	TBD	TBD
FSP/QAPP	November 2020	60 days
Project Operations Plan	February 2021	90 days
On-Site and Off-site Transportation Plan	March 2021	60 days
Quality of Life Plan	July 2021	90 days
Adaptive Management Plan	Nov 2021	30 days
Model Re-Evaluation Work Plan	Jan 2022	90 days
Biota Consumption Advisory Annual Report-MA	Feb 2021	30 days
Woods Pond and Rising Pond quarterly inspection reports and follow-up reports to the Biennial Inspections	Ongoing	30 days

^{*}See 2016 Permit and 2020 Settlement Agreement for a description of the Remedial Action and required documents.

7.6.2 Oversight of PRP design and investigation activities (Order)

Contractor shall provide field oversight to ensure compliance with the approved work plans. Contractor shall notify TOCOR daily if any non-compliance issues are observed and shall provide weekly summaries of oversight activities.

7.6.3 Technical Support and Management (Order)

Contractor shall:

-participate in weekly 30-minute calls with the PRP and State;

- -Generate and maintain a PRP report submittal tracking form indicating date received, status of internal comments, and status if discussions with the PRP;
- -Generate a weekly summary of field activities completed the previous week and field work forecasted for the upcoming week;
- -Participate in calls with EPA, DEP and the PRP as required to resolve issues.

7.7 Remedial Action and Operation and Maintenance Support (TBD) Assume 1000 hours

The contractor shall provide support to EPA in the oversight of the effectiveness of the implemented remedy. The contractor may also be requested to provide technical support at these sites. Remedial action and operation and maintenance activities can include: RA construction oversight, post-construction RA evaluations, O&M oversight, monitoring report and data review, and completing site closeout documentation.

Task 8: Other Work Areas/General Technical Assistance (Order and TBD)

Other Work Areas/General Technical Assistance activities specified, may include, but are not limited to:

- 8.1 Technical Assistance Meeting and Support
- 8.2 Targeted Brownfields Assessment (TBA)
- 8.3 EPA-lead Remedial Action (RA) or EPA-lead Removal Action (RV) Support
- 8.4 Five-Year Review
- 8.5 Optimization Reviews
- 8.6 Radiation Support
- 8.7 Negotiation, Litigation, and Expert Witness Support
- 8.8 Records Management and Administrative Support
- 8.9 Equipment/Services/Utilities, Site Maintenance and Site Security/Guard Services
- 8.10 EPA Initiatives

The contractor shall provide the following support under this task:

8.1 Technical Assistance Meeting and Support (Order)

The contractor shall provide support related to attendance at and documentation of meetings with EPA, potentially responsible parties (PRPs), the PRP contractor, and other stakeholders. The contractor shall attend various meetings throughout the performance of the task order document. These meetings are in addition to the meetings specifically included within other tasks in this SOW. The contractor may be required to prepare meeting minutes or comments. Assume two meeting per month, 2 hours each to be attended by PM and technical lead.

Contractor shall review PRP project-wide documents such as non-Rest of River QAPP/FSP and Project Operations Plan.

- 8.2 Targeted Brownfields Assessment (TBA)⁴⁵ (Not Applicable)
- 8.3 EPA-lead Remedial Action (RA) or EPA-lead Removal Action (RV) Support (Not Applicable)
- 8.4 Five-Year Review⁴⁶ (TBD) Assume 300 hours

The contractor shall provide technical support to conduct and draft Superfund five-year reviews. Support may include conducting site inspections and evaluations of response actions (e.g., review of site documents and records related to the operation and maintenance of the facility).

Most deliverables will be in the form of draft five-year reviews or alternatively summary documents if an

EPA Regional office requests specific analyses to support their five-year review.

8.5 Optimization Reviews⁴⁷ (TBD) Assume 100 hours

The contractor shall provide optimization support for site activities. Support will involve the evaluation of treatment systems, cleanup approaches, characterization and monitoring strategies and data for the purpose of optimizing site cleanup. This support area involves expert review (optimization) of hazardous waste site cleanup projects by multidisciplinary teams of engineers and scientists that are independent and conflict of interest free of project activities. Optimization reviews are intended to provide comprehensive evaluations of site cleanup activities to identify opportunities for improvement in five primary areas: remedy effectiveness, cost effectiveness, technical improvement, site closeout, and green remediation. Optimization activities may include: document and data review and analysis, developing recommendations, drafting an optimization report, and following up on implementation of recommendations.

8.6 Radiation Support⁴⁸ (Not Applicable)

8.7 Negotiation, Litigation, and Expert Witness Support (TBD) Assume 100 hours

The contractor shall provide services to assist with negotiation and litigation if:

- -The Final Permit is appealed or challenged at the Environmental Appeals Board or Federal Court.
- -The PRP or others invoke dispute resolution and the issue is elevated to Federal Court.

This includes attending meetings/conference calls; providing technical support for to respond to appeals; including technical and administrative support for legal briefs and court filings; preparing for the provision of expert testimony during litigation; attending and assisting in negotiation sessions and meetings. The contractor shall not prepare testimony for expert witnesses who are not EPA personnel.

8.8 Records Management, Data Base Management, GIS Support and Administrative Support (Order)

Records Management. The contractor shall assume responsibility for, manage and store for future retrieval the project files including electronic and hard copies of reports, documents, photographs, laboratory data, drawings and other material produced or received by EPA. The electronic files are currently tracked in Microsoft Excel and the hard copies are currently maintained in field office in Pittsfield, Massachusetts. There is an extensive volume of hard copy documents, comprising 300 linear feet of shelving. The incumbent contractor will provide the Excel files and access to the hard copies to the Contractor. There are approximately 20-40 documents each month that need to be managed.

The Office of Superfund Remediation and Technology Innovation (OSRTI) has developed the Superfund Enterprise Management System (SEMS)⁴⁹ to be the official recordkeeping system to manage and store all program records. The contractor shall submit all program records to the SEMS through the Regional records programs.

<u>Database Management.</u> The Contractor shall assume responsibility for, operate and maintain a database management system to effectively work with the volume of data that has been generated and stored for the project. Analytical laboratories will format electronic data deliverables (EDDs). The current system is a Microsoft Access database which contains over 20,000 sample records (>150 Mbytes). The incumbent contractor will provide the data base to the Contractor. The quantity of data records will be dependent on the number of samples collected by the Contractor and the number of EDD data sets received (see Section 2 above).

Assumptions:

- -Assume that the database manager will be maintaining the database on a regular monthly basis including processing the electronic data deliverables (EDDs) from the analytical labs and uploading them into the analytical database.
- -The database manager will complete the final data upload to the project database on a case-by-case basis following independent third-party validation of sample results and confirmation that laboratory quality control and quality assurance procedures have been achieved in accordance with project specific protocols. The EDDs are added to the database using a component of the TDMS database management tool which performs a variety of automated quality control steps, including verifying that all expected results are present in the EDD. Regular database maintenance such as file maintenance and data backup and quality control queries will be performed.

GIS Support. The Contractor shall assume responsibility for, and operation and maintenance of the project's current GIS data-marts that store location data associated with all samples collected on the project to date (x,y coordinates). These data-marts are referred to as the GIS database. The incumbent contractor will provide the data base to the Contractor. The contractor will convert these files to GIS feature classes and format them for compliance with the legacy applications used to present the data cartographically. The Contractor will plot the newly uploaded data files on a basic topographic feature background to verify that the physical locations of the samples plot in accordance with the sample attributes (i.e. sediment locations plot in a body of water). The quantity of data records will be dependent on the number of samples collected by the Contractor (see Section 2 above).

The Contractor shall also assume responsibility for, and operation and maintenance of the project's current GIS files, base maps and associated data. The incumbent contractor will provide the current GIS files to the Contractor.

Assumptions:

- -Historically, 20 new data files with GIS information are received each year.
- -Use GIS and other graphics support capabilities to generate approximately 50 Figures that plot data with GIS information, and 25 other Figures generated with the GIS data base or form commercially available information, such as google earth.

<u>Maintenance of a VPN.</u> The contractor shall assume responsibility for, and operation and maintenance of the project's current files being maintained on a VPN. The incumbent contractor will provide the current VPN information to the Contractor.

The contractor shall provide EPA with a comprehensive electronic final archival of data and data deliverables that are consistent with EPA national and regional-specific requirements.

8.9 Equipment/Services/Utilities, Site Maintenance and Site Security/Guard Services (Order)

Equipment/Services/Utilities and Site Maintenance (Order)

EPA intends to lease office and warehouse space in the local area of the Site. The space can be used to store government furnished equipment, support sampling efforts and field oversight, and for meetings with stakeholders. The contractor can consider this space in determine additional needs to support contractor operations.

The contractor shall maintain and track Government Furnished Equipment (GFE). The current inventory of GFE is provided as an attachment. There is additional GFE present in the field office that needs to be

maintained, but not tracked, that will be available to the Contractor.

The contractor shall provide assistance to EPA in keeping the site functional and safe. This includes but is not limited to: acquiring long-lead equipment, services, and/or utilities as necessary; safeguarding material and personnel working at the site; security services as necessary during field activities; maintaining a daily log of all personnel entering and exiting the site; complying with OSHA Regulation 29 CFR 1910, Hazardous Waste Operations and Emergency Response.

8.10 EPA Initiatives (Not Applicable)

Footnote References

- 1 For more information on Conceptual Site Models and their role throughout the remediation process, please refer to EPA 542-F-11-011, *Environmental Cleanup Best Management Practices: Effective Use of the Project Life Cycle Conceptual Site Model*, July 2011.
- ² Refer to EPA-505-B-04-900A, *Uniform Federal Policy for Quality Assurance Project Plans*, Version 1, March 2005.
- ³ Refer to EPA/240/B-06/001, EPA QA/G4: Guidance on Systematic Planning Using the Data Quality Objectives Process, February 2006.
- ⁴ Refer to 29 CFR 1910.120(l)(1) and (l)(2).
- ⁵ Refer to ASTM International's *Standard Guide for Greener Cleanups* (E2893-13), November 2013, *EPA's Principles for Greener Cleanups* (http://www.epa.gov/oswer/greenercleanups/principles.html), *Superfund's Green Remediation Strategy* (http://www.epa.gov/oswer/greenercleanups/strategy.html), and Attachment B for applicable regional policy and guidance related to reducing the environmental footprint of all phases of cleanup activities under this contract.
- ⁶ For more information on EPA's optimization initiative, refer to 9200.3-75, *National Strategy to Expand Superfund Optimization Practices from Site Assessment to Site Completion*, September 2012. For additional information on optimization, refer to http://www.epa.gov/superfund/cleanup/postconstruction/optimize.htm.
- ⁷ For more information on HRSC, refer to http://www.cluin.org/characterization/technologies/hrsc/
- 8 The contractor shall provide community involvement support to EPA in accordance with the NCP (40 CFR Part 300) and Community Relations in Superfund A Handbook (U.S. EPA, Office of Emergency and Remedial Response, EPA 540-K-05-003, April 2005). For more information on Superfund community involvement, refer to http://www.epa.gov/superfund/community/policies.htm
- ⁹ For more information on Community Involvement Plans, please refer to http://www.epa.gov/hudson/cip.htm.
- ¹⁰ All field operations should be conducted using Field Activities Procedure CIO 2105-P-02.0.
- ¹¹ Refer to OSWER 9345.3-03FS Guide to Management of Investigation-Derived Wastes, January 1992.
- ¹² For more information on Scribe, please refer to https://www.epaosc.net/scribe
- ¹³ This may include state or other Federal certifications for the specific analytical method requested. Certifications or experience with similar methods may not be considered sufficient evidence of capability. The laboratory's capability to perform the requested method shall be documented in the UFP-QAPP.
- ¹⁴For more information on Staged Electronic Data Deliverables, refer to http://www.epa.gov/fem/sedd.htm.
- ¹⁵ The contractor shall incorporate EPA electronic assessment tools (EXES) whenever possible. For more information on EXES, refer to http://www.epa.gov/superfund/programs/clp/data_assessment.htm.
- ¹⁶ In general, the validated data set should be delivered to EPA as a Scribe-compatible data deliverable.
- ¹⁷ All geospatial data must be submitted as unprojected geographic coordinates in decimal degree format using North American Datum 1983 (NAD83) or World Geodetic System 1984 (WGS84) as the datum. These coordinate requirements are specified in the EPA National Geospatial Data Policy, 2008.
- ¹⁸ All GIS files must have associated Federal Geographic Data Committee (FGDC) compliant metadata. The Content Standard for Digital Geospatial Metadata can be found at http://www.fgdc.gov. An add-on editor for ESRI software, EPA Metadata Editor (EME), complies with the FGDC metadata requirement and is available at https://edg.epa.gov/EME/.
- ¹⁹ For more information on Conceptual Site Models and their role throughout the remediation process, please refer to EPA 542-F-11-011, *Environmental Cleanup Best Management Practices: Effective Use of the Project Life Cycle Conceptual Site Model*, July 2011.
- ²⁰ For more information on treatability studies, refer to EPA/540/R-92/071a *Guide for Conducting Treatability Studies Under CERCLA*, November, 1993
- ²¹For policies and fact sheets specific to ARARs, refer to the following website: http://www.epa.gov/superfund/policy/remedy/sfremedy/arars.htm.
- ²² For more information on screening level ecological risk assessments, refer to EPA 540/F-01/014 *ECO Update: The Role of Screening-Level Risk Assessments and Refining Contaminants of Concern in Baseline Ecological Risk Assessments*, June 2001.
- ²³ For more information on Superfund human health risk assessments, refer to EPA/540/1-89/002 *Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual (Part A)*, December 1989
- ²³ For more information on Superfund human health risk assessments, refer to EPA/540/1-89/002 *Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual (Part A)*, December 1989,

- ²⁵ For information on the contents of the Remedial Investigation report, refer to Table 3-13 of OSWER Directive 9355.3-01 *Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA*, October 1988.
- ²⁶ For information of the alternatives screen process, refer to Chapter 4 of OSWER Directive 9355.3-01 *Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA*, October 1988. For information on evaluating presumptive remedy alternatives, refer to the Presumptive Remedies webpage: http://www.epa.gov/superfund/policy/remedy/presump/pol.htm
- ²⁷ For the evaluation criteria, refer to the 40 CFR 300.430(e)(2)(G)(9)(iii) and Chapter 6 of OSWER Directive 9355.3-01 *Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA*, October 1988.
- ²⁸ For information on developing costing information for alternatives, please refer to OSWER 9355.0-75 *A Guide for Developing and Documenting Cost Estimates During the Feasibility Study*, July 2000.
- ²⁹ For information on the contents of the Feasibility Study report, refer to Table 6-5 of OSWER Directive 9355.3-01 *Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA*, October 1988.
- ³⁰ Refer to 40 CFR 300.415(b)(4)(i)
- ³¹ For more information on screening level ecological risk assessments, refer to EPA 540/F-01/014 ECO Update: The Role of Screening-Level Risk Assessments and Refining Contaminants of Concern in Baseline Ecological Risk Assessments, June 2001.
- ³² For more information on Superfund human health risk assessments, refer to EPA/540/1-89/002 *Risk Assessment Guidance for Superfund Volume I Human Health Evaluation Manual (Part A)*, December 1989,
- ³⁴ For more information of the evaluation of alternatives, refer to Chapter 6 of EPA540-R-93-057 *Guidance on Conducting Non-Time-Critical Removal Actions Under CERCLA*, August 1993. For information on evaluating presumptive remedy alternatives, refer to the Presumptive Remedies webpage: http://www.epa.gov/superfund/policy/remedy/presump/pol.htm.
- ³⁵ For the comparative analysis criteria, refer to Exhibit 7 and Chapter 6 of EPA540-R-93-057 *Guidance on Conducting Non-Time-Critical Removal Actions Under CERCLA*, August 1993.
- ³⁶ For performing cost projections for the removal alternatives, refer to OSWER 9360.0-02C *Removal Cost Management System: Version 3.2*, May 1990 or later version.
- ³⁷ For information on the contents of the EE/CA report, refer to Exhibit 5 of EPA540-R-93-057 *Guidance on Conducting Non-Time-Critical Removal Actions Under CERCLA*, August 1993.
- ³⁸ For information on the contents of the Action Memorandum, refer to *Superfund Removal Guidance for Preparing Action Memoranda*, September 2009.
- ³⁹ For additional information on the designs, please refer to OSWER 9355.0-04B *Remedial Design/Remedial Action*
- (RD/RA) Handbook, June 1995, EPA 540-R-93-087 and the Guidance for Non-Time Critical Removal Actions under CERCLA, August 1993 (EPA, 1987, or latest revision).
- ⁴⁰ For Federal Department VE requirements, refer to the Office of Management and Budget Circular No. A-131 (revised), December 26 2013.
- ⁴¹ For more information on the Superfund VE process requirements for EPA-lead projects, refer to OSWER 9335.5-24, *Value Engineering for Fund-Financed Remedial Design and Remedial Action Projects*, April 2006.
- The contractor shall use only up-to-date guide specifications where such a guide exists. Specifications are available at the following Unified Facilities Guide Specifications internet address:

 http://www.wbdg.org/ccb/browse_org.php?o=70. In the event that a guide specification is not represented from these specification sources, a new specification title shall be created and inserted in the most appropriate division. Guide specifications may be downloaded in SpecsIntact SGML (zipped) file format at the following Internet address: http://www.wbdg.org/ccb/browse_org.php?o=70. The contractor shall utilize SpecsIntact software.
 - **SpecsIntact** is an automated specification processing system for use in preparing construction project specifications from the master guide specifications. SpecsIntact is available for download at http://www.wbdg.org/tools/specsintact.php.
 - ⁴³ This document identifies the shop drawings, continuation of design analysis, equipment specifications, and samples that the Construction Contractor shall have to submit to the Government to assure that those items comply with the Contract specifications. Items shall be classified for Government Approval or For Information

Only. The contractor shall utilize SpecsIntact software to prepare the Submittal Register and the format shall follow the UFGS Submittal Format.

- ⁴⁴Cost estimates will be completed utilizing an industry approved software package capable of providing sufficient information to adequately and accurately capture the projected project costs. It is recommended that estimated costs be submitted by using the software, "Microcomputer-Aided Cost Estimated System (MCACES), Second Generation (MII), latest version: by Building Systems Design, or a similar cost estimating system.
- ⁴⁵ For more information on Targeted Brownfield Assessment Programs in each Region, refer to http://www.epa.gov/brownfields/grant_info/tba.htm.
- ⁴⁶ For more information and guidance related to Superfund five-year reviews, please refer to http://www.epa.gov/superfund/fiveyearreview/.
- ⁴⁷ For more information on EPA's optimization initiative, refer to 9200.3-75, *National Strategy to Expand Superfund Optimization Practices from Site Assessment to Site Completion*, September 2012.
- ⁴⁸ Radiation support should conform to proper radiation investigation protocols outlined in the EPA402-R-97- 016/NUREG-1575, *Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM)*.
- ⁴⁹ SEMS was designed and implemented in compliance with Presidential Memorandum M-12-18: Managing Government Records (11-28-2011), and subsequent Directive (08-24-2012). These directives commit all Federal Agencies to transition to a digital government.

Appendix 1 – Region 1 QA Requirements References

- 1. ANSI/ASQC E4-2014, Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs, American National Standard, or most recent revision, https://www.epa.gov/quality
- 2. EPA QA/R-2, EPA Requirements for Quality Management Plans (EPA/240/B-01/002), 3/20/2001, or most recent revision, https://www.epa.gov/quality
- 3. EPA QA/R-5, EPA Requirements for Quality Assurance Project Plans for Environmental Data Operations (EPA/240/B-01/002), 3/20/2001, or most recent revision, https://www.epa.gov/quality
- 4. EPA QA/G-5, *EPA Guidelines for Quality Assurance Project Plans* (EPA/240/R-02-009), 12/2002, or most recent revision, https://www.epa.gov/quality
- 5. EPA-540-R-08-01, *USEPA Contract Laboratory Program National Functional Guidelines* for Superfund Organic Methods Data Review, most recent revision, https://www.epa.gov/clp
- 6. EPA-540-R-10-011, USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Program Review, most recent revision, https://www.epa.gov/clp
- 7. EPA-540-R-11-016, USEPA Contract Laboratory Program National Functional Guidelines for Chlorinated Dioxin/Furan Data Review, most recent revision, https://www.epa.gov/clp
- 8. EPA-540-R-08-005, Guidance for Labelling Externally Validated Laboratory Analytical Data for Superfund Use, January 2009, https://www.epa.gov/clp
- 9. *EPA New England Environmental Data Review Program Guidance*, most recent revision, https://www.epa.gov/quality/epa-new-england-environmental-data-review-program-guidance
- 10. EPA New England Environmental Data Review Supplement for Regional Data Review Elements and Superfund Guidance/Procedures, most recent revision, https://www.epa.gov/quality/epa-new-england-environmental-data-review-supplement
- 11. Program Guidance and Requirements, Procedures for Obtaining Analytical Services in Region 1's Superfund Program, *FASTAC and Procedures for Selecting Superfund Analytical Services*, Region 1 memo, most recent version, https://www.epa.gov/quality/managing-quality-environmental-data-epa-region-1

The following contract clauses have been modified or added for this task order:

EPAAR 1552.237-72 KEY PERSONNEL. (APR 1984)

(a) The contractor shall assign to this contract the following key personnel:

Task Order Title (Quals submittal)	Labor Category (Contract)	Name	Contractor/Team Subcontractor
(b) (4)		(b) (6)	(b) (4)

- Team Subcontractor = Taconic Ridge Environmental, Inc.
- (b) During the first ninety (90) days of performance, the Contractor shall make no substitutions of key personnel unless the substitution is necessitated by illness, death, or termination of employment. The Contractor shall notify the Contracting Officer within 15 calendar days after the occurrence of any of these events and provide the information required by paragraph (c) of this clause. After the initial 90-day period, the Contractor shall submit the information required by paragraph (c) to the Contracting Officer at least 15 days prior to making any permanent substitutions.
- (c) The Contractor shall provide a detailed explanation of the circumstances necessitating the proposed substitutions, complete resumes for the proposed substitutes, and any additional information requested by the Contracting Officer. Proposed substitutes should have comparable qualifications to those of the persons being replaced. The Contracting Officer will notify the Contractor within 15 calendar days after receipt of all required information of the decision on substitutions. This clause will be modified to reflect any approved changes of key personnel.

I-14 FAR 52.244-2 SUBCONTRACTS (OCT 2010) – ALTERNATE I (JUN 2007)

- (a) Definitions. As used in this clause
- "Approved purchasing system" means a Contractor's purchasing system that has been reviewed and approved in accordance with Part 44 of the Federal Acquisition Regulation (FAR).
- "Consent to subcontract" means the Contracting Officer's written consent for the Contractor to enter into a particular subcontract.
- "Subcontract" means any contract, as defined in FAR Subpart 2.1, entered into by a subcontractor to furnish supplies or services for performance of the prime contractor a subcontract. It includes, but is not limited to, purchase orders, and changes and modifications to purchase orders.
- (b) When this clause is included in a fixed-price type contract, consent to subcontract is required only on unpriced contract actions (including unpriced modifications or unpriced delivery orders), and only if required in accordance with paragraph (c) or (d) of this clause.
- (c) If the Contractor does not have an approved purchasing system, consent to subcontract is required for any subcontract that-
- (1) Is of the cost-reimbursement, time-and-materials, or labor-hour type; or
- (2) Is fixed-price and exceeds-
- (i) For a contract awarded by the Department of Defense, the Coast Guard, or the National Aeronautics and Space Administration, the greater of the simplified acquisition threshold or 5 percent of the total estimated cost of the contract; or
- (ii) For a contract awarded by a civilian agency other than the Coast Guard and the National Aeronautics and Space Administration, either the simplified acquisition threshold or 5 percent of the total estimated cost of the contract.

(d) If the Contractor has an approved purchasing system, the Contractor nevertheless shall obtain the Contracting Officer's written consent before placing the following subcontracts:

ANY SUBCONTRACT THAT EXCEEDS THE GREATER OF THE SIMPLIFIED ACQUISITION THRESHOLD, OR FIVE PERCENT OF THE TOTAL ESTIMATED COST OF THE CONTRACT

- (e)(1) The Contractor shall notify the Contracting Officer reasonably in advance of placing any subcontract or modification thereof for which consent is required under paragraph (b), (c) or (d) of this clause, including the following information:
- (i) A description of the supplies or services to be subcontracted.
- (ii) Identification of the type of subcontract to be used.
- (iii) Identification of the proposed subcontractor.
- (iv) The proposed subcontract price.
- (v) The subcontractor's current, complete, and accurate certified cost or pricing data and Certificate of Current Cost or Pricing Data, if required by other contract provisions.
- (vi) The subcontractor's Disclosure Statement or Certificate relating to Cost Accounting Standards when such data are required by other provisions of this contract.
- (vii) A negotiation memorandum reflecting-
- (A) The principal elements of the subcontract price negotiations;

Design and Engineering Services

- (B) The most significant considerations controlling establishment of initial or revised prices;
- (C) The reason certified cost or pricing data were or were not required;
- (D) The extent, if any, to which the Contractor did not rely on the subcontractor's certified cost or pricing data in determining the price objective and in negotiating the final price;
- (E) The extent to which it was recognized in the negotiation that the subcontractor's certified cost or pricing data were not accurate, complete, or current; the action taken by the Contractor and the subcontractor; and the effect of any such defective data on the total price negotiated;
- (F) The reasons for any significant difference between the Contractor's price objective and the price negotiated; and
- (G) A complete explanation of the incentive fee or profit plan when incentives are used. The explanation shall identify each critical performance element, management decisions used to quantify each incentive element, reasons for the incentives, and a summary of all trade-off possibilities considered.
- (2) If the Contractor has an approved purchasing system and consent is not required under paragraph (c) or (d) of this clause, the Contractor nevertheless shall notify the Contracting Officer reasonably in advance of entering into any (i) cost-plus-fixed-fee subcontract, or (ii) fixed-price subcontract that exceeds either the simplified acquisition threshold or 5 percent of the total estimated cost of this contract. The notification shall include the information required by paragraphs (e)(1)(i) through (e)(1)(iv) of this clause.
- (f) Unless the consent or approval specifically provides otherwise, neither consent by the Contracting Officer to any subcontract nor approval of the Contractor's purchasing system shall constitute a determination-
- (1) Of the acceptability of any subcontract terms or conditions;
- (2) Of the allowability of any cost under this contract; or
- (3) To relieve the Contractor of any responsibility for performing this contract.
- (g) No subcontract or modification thereof placed under this contract shall provide for payment on a cost-plus-a-percentage-of-cost basis, and any fee payable under cost-reimbursement type subcontracts shall not exceed the fee limitations in FAR 15.404-4(c)(4)(i).
- (h) The Contractor shall give the Contracting Officer immediate written notice of any action or suit filed and prompt notice of any claim made against the Contractor by any subcontractor or vendor that, in the opinion of the Contractor, may result in litigation related in any way to this contract, with respect to which the Contractor may be entitled to reimbursement from the Government.
- (i) The Government reserves the right to review the Contractor's purchasing system as set forth in FAR Subpart 44.3.
- (j) Paragraphs (c) and (e) of this clause do not apply to the following subcontracts, which were evaluated during negotiations: Any A&E Team Subcontractors that were either evaluated during contract negotiations or consented to or approved by the Administrative Contracting Officer after award.

The following clause is hereby incorporated:

(a) *Definitions*. As used in this clause—

Backhaul means intermediate links between the core network, or backbone network, and the small subnetworks at the edge of the network (e.g., connecting cell phones/towers to the core telephone network). Backhaul can be wireless (e.g., microwave) or wired (e.g., fiber optic, coaxial cable, Ethernet).

Covered foreign country means The People's Republic of China.

Covered telecommunications equipment or services means-

- (1) Telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities);
- (2) For the purpose of public safety, security of Government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities);
 - (3) Telecommunications or video surveillance services provided by such entities or using such equipment; or
- (4) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

Critical technology means-

- (1) Defense articles or defense services included on the United States Munitions List set forth in the International Traffic in Arms Regulations under subchapter M of chapter I of title 22, Code of Federal Regulations;
- (2) Items included on the Commerce Control List set forth in Supplement No. 1 to part 774 of the Export Administration Regulations under subchapter C of chapter VII of title 15, Code of Federal Regulations, and controlled-
- (i) Pursuant to multilateral regimes, including for reasons relating to national security, chemical and biological weapons proliferation, nuclear nonproliferation, or missile technology; or
 - (ii) For reasons relating to regional stability or surreptitious listening;
- (3) Specially designed and prepared nuclear equipment, parts and components, materials, software, and technology covered by part 810 of title 10, Code of Federal Regulations (relating to assistance to foreign atomic energy activities);
- (4) Nuclear facilities, equipment, and material covered by part 110 of title 10, Code of Federal Regulations (relating to export and import of nuclear equipment and material);
- (5) Select agents and toxins covered by part 331 of title 7, Code of Federal Regulations, part 121 of title 9 of such Code, or part 73 of title 42 of such Code; or
- (6) Emerging and foundational technologies controlled pursuant to section 1758 of the Export Control Reform Act of 2018 (50 U.S.C. 4817).

Interconnection arrangements means arrangements governing the physical connection of two or more networks to allow the use of another's network to hand off traffic where it is ultimately delivered (e.g., connection of a customer of telephone provider A to a customer of telephone company B) or sharing data and other information resources.

Reasonable inquiry means an inquiry designed to uncover any information in the entity's possession about the identity of the producer or provider of covered telecommunications equipment or services used by the entity that excludes the need to include an internal or third-party audit.

Roaming means cellular communications services (e.g., voice, video, data) received from a visited network when unable to connect to the facilities of the home network either because signal coverage is too weak or because traffic is too high.

Substantial or essential component means any component necessary for the proper function or performance of a piece of equipment, system, or service.

- (b) Prohibition. (1) Section 889(a)(1)(A) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2019, from procuring or obtaining, or extending or renewing a contract to procure or obtain, any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. The Contractor is prohibited from providing to the Government any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, unless an exception at paragraph (c) of this clause applies or the covered telecommunication equipment or services are covered by a waiver described in FAR 4.2104.
- (2) Section 889(a)(1)(B) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232) prohibits the head of an executive agency on or after August 13, 2020, from entering into a contract, or extending or renewing a contract, with an entity that uses any equipment, system, or service that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system, unless an exception at paragraph (c) of this clause applies or the covered telecommunication equipment or services are covered by a waiver described in FAR 4.2104. This prohibition applies to the use of covered telecommunications equipment or services, regardless of whether that use is in performance of work under a Federal contract.
 - (c) Exceptions. This clause does not prohibit contractors from providing—
- (1) A service that connects to the facilities of a third-party, such as backhaul, roaming, or interconnection arrangements; or
- (2) Telecommunications equipment that cannot route or redirect user data traffic or permit visibility into any user data or packets that such equipment transmits or otherwise handles.
 - (d) Reporting requirement.
- (1) In the event the Contractor identifies covered telecommunications equipment or services used as a substantial or essential component of any system, or as critical technology as part of any system, during contract performance, or the Contractor is notified of such by a subcontractor at any tier or by any other source, the Contractor shall report the information in paragraph (d)(2) of this clause to the Contracting Officer, unless elsewhere in this contract are established procedures for reporting the information; in the case of the Department of Defense, the Contractor shall report to the website at https://dibnet.dod.mil. For indefinite delivery contracts, the Contractor shall report to the Contracting Officer for the indefinite delivery contract and the Contracting Officer(s) for any affected order or, in the case of the Department of Defense, identify both the indefinite delivery contract and any affected orders in the report provided at https://dibnet.dod.mil.
 - (2) The Contractor shall report the following information pursuant to paragraph (d)(1) of this clause
- (i) Within one business day from the date of such identification or notification: the contract number; the order number(s), if applicable; supplier name; supplier unique entity identifier (if known); supplier Commercial and Government Entity (CAGE) code (if known); brand; model number (original equipment manufacturer number, manufacturer part number, or wholesaler number); item description; and any readily available information about mitigation actions undertaken or recommended.
- (ii) Within 10 business days of submitting the information in paragraph (d)(2)(i) of this clause: any further available information about mitigation actions undertaken or recommended. In addition, the Contractor shall describe the efforts it undertook to prevent use or submission of covered telecommunications equipment or services, and any additional efforts that will be incorporated to prevent future use or submission of covered telecommunications equipment or services.

(e) *Subcontracts*. The Contractor shall insert the substance of this clause, including this paragraph (e) and excluding paragraph (b)(2), in all subcontracts and other contractual instruments, including subcontracts for the acquisition of commercial items.

(End of clause)